

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

---

## **General Project Information**

### **Project Description Narratives**

#### **Purpose, Scope, and Technical Approach:**

**Purpose:** In accordance with the intent of the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-1 IP, the purpose of this project is to package all material greater than 30wt% plutonium, plus selected other materials, in containers meeting the requirements of DOE-STD-3013 for shipment to other DOE sites. Such repackaging also addresses the DNFSB Recommendation 94-3 IPP by placing dispersible plutonium oxide in more robust containment.

The DNFSB and the Plutonium ES&H Vulnerability Study identified plutonium storage as a safety concern at RFETS. Workers, the public, and the environment could be adversely affected by an accident caused by failure of plutonium packaging. Completion of this project will greatly reduce the likelihood of such packaging failures. Workers will be required to handle large amounts of plutonium metal and oxide, but effective design and an automated packaging system will assist in reducing risks to acceptable levels.

**Scope:** RFETS has plutonium metal and plutonium oxide in storage. All of this material, except metal in pits and other selected metals is being shipped offsite, and is included in the scope of this project. In addition, less than 200 kg of plutonium oxide will arise from liquid processing. To address these materials and comply with the requirements, there are four elements to this project.

#### **1. Near-Term Compliance.**

Plutonium metal and oxide will be maintained in compliance with site storage and transfer requirements (1-W89-HSP-31.11). This work occurs in element 1.1.04.09.05.01 and .02.

#### **2. Size Reduction.**

Plutonium metal items that are too large to fit the inner DOE-STD-3013 container will be size-reduced. This work occurs in element 1.1.04.09.05.03.

#### **3. Long-Term Packaging.**

Plutonium metal and oxide will be repackaged in nested containers that meet the requirements of DOE-STD-3013, which also supports completion of DNFSB Recommendation 94-1 IP commitments and Site closure goals. This is estimated to be 700 containers of metal and 1,200 containers of oxide. This work occurs in elements 1.1.04.08.01.05, 1.1.04.09.05.01.01, and 1.1.04.09.06.

#### **4. Decommissioning and Demolition.**

Upon the completion of the stabilization and packaging mission, PuSPS will be decontaminated, decommissioned and demolished. This work occurs in element 1.1.04.09.06.02.

**Technical Approach:** Near-Term Compliance. This portion of the project will ensure that plutonium is maintained in compliance with site storage and transfer requirements (1-W89-HSP-31.11). Periodic surveillance of plutonium metal will be performed to detect weight gains that might indicate oxidation; brushing of the metal to separate loose oxide (if necessary); thermal stabilization of the oxide to eliminate pyrophoricity; and repackaging of the metal and oxide. This work occurs in element 1.1.04.09.05.01 and .02.

---

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 1 of 12

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

---

## **Project Description Narratives**

**Size Reduction.** All solid plutonium metal at the site will be repackaged in a container that meets the requirements of the inner container per DOE-STD-3013. Some of the metal items, such as ingots, are currently too large to fit in the new storage container and must be size-reduced. The majority of metal items requiring size reduction are located in B707. This element will restart existing equipment in B707 and perform size reduction on those items that require it. This work occurs in element 1.1.04.09.05.03.

**Long-Term Packaging.** To meet DNFSB Recommendation 94-1 IP milestones to safely repackage the Site's plutonium metal and oxide, all materials to which DOE-STD-3013 applies (i.e., greater than 30 wt% plutonium) will be stabilized and repackaged into nested welded containers using manual stabilization furnaces and the BNFL Packaging System. In addition, a portion of the site's inventory that is less than 30 wt% plutonium will also be repackaged. This activity will include all of the material campaigning and staging necessary to support an efficient use of containers, along with required non-destructive assay. The preparation for this work occurs in element 1.1.04.08.01, the operations occurs in element 1.1.04.09.06.

### **Project Status in FY 2006:**

This project will be completed.

### **Post-2006 Project Scope:**

No activities are currently scheduled to occur after 2006 for this project.

### **Project End State**

In accordance with the intent of the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-1 IP, all material greater than 30wt% plutonium, plus selected other materials, will be packaged in containers meeting the requirements of DOE-STD-3013 for shipment to other DOE sites.

### **Cost Baseline Comments:**

Cost estimates are based on assumptions and data developed by the technical groups that have responsibility for managing the work. To the extent practical, all cost estimates are Activity-Based Costs (ABC) and tied directly to a defined and detailed work scope. The estimates are developed at the activity level and are further divided into line items. Line items represent individual resource contributions to activities and are the lowest level of input to the planning system. Once the cost estimate is developed, each activity is evaluated for cost, technical and schedule risk and the appropriate contingency is determined. Detailed estimates and the basis of estimates (BOEs) for the 2006 Closure Plan are available at the Site.

### **Safety & Health Hazards:**

The principle hazards in the Pu Metals and Oxides Stabilization Project are radiological, criticality, chemical, and other standard industrial hazards commonly found in Pu buildings at RFETS. Most of these hazards will exist throughout the project and are related to SNM material movement, maintenance, surveillance, inspection, metal and oxide stabilization, packaging, welding, storage, and some safety system upgrades and new construction (including strip out). These hazards will be analyzed and categorized in accordance with the RFETS Safety and Health Program infrastructure policies, manuals, and procedures.

### **Safety & Health Work Performance:**

---

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 2 of 12

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

---

## **Project Description Narratives**

This project will be completed within the RFETS Safety and Health Program and within the controls and authorization basis documents defined above to ensure the safety and health of the worker, public and the environment. RFETS has implemented an Integrated Safety Management System (ISM) consisting of the following elements: radiological safety, criticality safety, emergency management, fire safety, industrial hygiene, nuclear safety, occupational medicine, occupational safety, safeguards and security, safety integration, performance oversight, and standards management.

RFETS provides site wide infrastructure programs for each functional area to establish consistent safety standards and support for this project. Safety and health success results from the efficient and effective implementation of these programs. This project is responsible for ensuring that the necessary elements of the safety and health programs are incorporated into the specific project plans and implementing documents, and that an appropriate Readiness Determination and Safety Evaluation Screen (SES)/Unreviewed Safety Question Determination (USQD) have been performed.

### **PBS Comments:**

The proposed funding profile only supports the use of a single SPS at RFETS. A second system has been proposed, but there is insufficient funding for it. Although the ability to support the 94-1 commitment with a single SPS is not certain, since the capability of the prototype has yet to be demonstrated, confidence is high that a single system is the most economically and programmatically feasible approach, and that it will support the May, 2002 DNFSB commitment.

### **Baseline Validation Narrative:**

Although the 2006 Closure Plan has not been officially validated, it has undergone a high level review by Rocky Flats Field Office (RFFO) and Headquarter personnel. Current independent validation efforts include the following: 1) RFFO has contracted an independent firm to perform a baseline confidence review of the 2006 Closure Plan by the end of FY99, and 2) the Office of Field Management (FM) has contracted a big-five accounting firm to validate the 2006 Closure Plan.

In addition to the 2006 Closure Plan validation efforts, results/recommendations from several previous baseline validation efforts were used in the development of the 2006 Closure Plan. These validations included: 1) The U.S. Army Corps of Engineers (USACE) performed a validation of the Rocky Flats Ten Year Plan in FY97/FY98, 2) Kaiser-Hill contracted Price Waterhouse Coopers, LLP to conduct and independent validation effort of the 2010 Closure Project Baseline that concluded in May of FY99, and 3) Kaiser-Hill engaged Arthur Andersen, LLP to conduct a schedule and cost risk review of the 2010 Closure Project Baseline.

## **General PBS Information**

<b>Project Validated?</b>	<b>Date Validated:</b>
<b>Has Headquarters reviewed and approved project?</b>	No
<b>Date Project was Added:</b>	12/1/1997
<b>Baseline Submission Date:</b>	
<b>FEDPLAN Project?</b>	Yes

---

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

## General PBS Information

Drivers:	CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
	N	N	Y	N	N	Y	Y	Y

## Project Identification Information

DOE Project Manager: Jessie Roberson

DOE Project Manager Phone Number: 303-966-2263

DOE Project Manager Fax Number: 303-966-4775

DOE Project Manager e-mail address: ten.year.plan@rfets.gov

Is this a High Visibility Project (Y/N): Y

## Planning Section

### Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006	
PBS Baseline (current year dollars)	71,475	0	71,475	5,969	5,969	7,207	7,207	21,464	19,331	9,795	3,848	3,861	0	0	0	
PBS Baseline (constant 1999 dollars)	69,930	0	69,930	5,969	5,969	7,207	7,207	21,464	18,823	9,341	3,594	3,532	0	0	0	
PBS EM Baseline (current year dollars)	71,472	0	71,472	5,966	5,966	7,207	7,207	21,464	19,331	9,795	3,848	3,861	0	0	0	
PBS EM Baseline (constant 1999 dollars)	69,927	0	69,927	5,966	5,966	7,207	7,207	21,464	18,823	9,341	3,594	3,532	0	0	0	
	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dataset Name: **FY 1999 Planning Data**

Page 4 of 12

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: EM CDB

Report Number: GEN-01b

Operations/Field Office: Rocky Flats

Print Date: 3/9/2000

Site Summary Level: Rocky Flats Environmental Technology Site

HQ ID: 0339

Project RF008 / Pu Metals and Oxides Stabilization

	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Non-EM Costs included in the Cost Baseline

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Non-EM Category: Other													
Defense Programs	0												
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
Non-EM Category: Other													
Defense Programs													

## Baseline Escalation Rates

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	0.00%	0.00%	0.00%	2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

## Project Reconciliation

Project Completion Date Changes:

Dataset Name: FY 1999 Planning Data

Page 5 of 12

Date of Dataset: 9/20/1999

# Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Rocky Flats

Site Summary Level: Rocky Flats Environmental Technology Site

Project RF008 / Pu Metals and Oxides Stabilization

Report Number: GEN-01b

Print Date: 3/9/2000

HQ ID: 0339

## Project Reconciliation

Previously Projected End Date of Project: 9/30/2004

Current Projected End Date of Project: 5/2/2003

Explanation of Project Completion Date Difference (if applicable):

Scope Deletion

Efficiencies

New Scope

1) Delay in receipt of the Government Furnished Equipment (GFE) and additional requirements for BNFL Acceptance Testing as directed by RFFO (MSD:MSM:01800, February 27, 1998). The delay in delivery of the PuSPS as GFE has resulted in delays in the installation and testing of the PuSPS.

2) Transfer of the responsibility of the PuSPS Broomfield Lease and post-acceptance testing from DOE to K-H as directed by RFFO (DOE Memorandum: MSD:JES:01807, March 27, 1998).

3) Installation of the PuSPS packaging system in B371 along with manual furnace capability for stabilization of the oxide inventory as directed by DOE memorandum. This additional PuSPS change provided for the conceptual design, Title I System Design, D&D preparations, management to support B371 installation, the final installation, the disposition of the PuSPS stabilization equipment and the operation of the packaging system.

4) Procurement of DOE-STD-3013 containers for use in the PuSPS supplied by DOE as Government Furnished Equipment (GFE).

5) Accelerating the installation of the stabilization system.

Cost Growth

Science & Technology

Other

The scope of work and end state conditions for the 2006 Plan are similar to the current 2010 Baseline, with a four-year acceleration and a reduction in cost being the two most significant differences. The bottom-up estimate for the 2006 Plan is a \$1.65 billion improvement over the comparable activity-based bottoms-up detail estimate for 2010.

To close the Site four years earlier than the current 2010 Baseline requires a strategically different approach. The two key principles followed in preparing the 2006 Baseline were: 1) safely reducing the urgent risks first, and 2) performing work in a sequence that reduces or eliminates operations, maintenance and security costs (often referred to as - mortgage costs) as early as possible. Key to the 2006 Baseline approach is early closure of the secured Protected Area. Closing the Protected Area as soon as possible means that the high security and maintenance costs for this area can be redeployed to accelerate other closure activities. In addition, D&D and SNM risk reduction activities will be performed simultaneously rather than sequentially, supporting both the risk reduction and mortgage reduction principles. The D&D of non- and lower-contaminated facilities and most environmental remediation work will be deferred until later in the project to allow resources to be focused in the areas that result in the greatest reduction in risks and mortgage costs.

## Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	63,106	Actual 1997 Cost:	5,966	Actual 1998 Cost:	7,207
--	--------	-------------------	-------	-------------------	-------

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	49,933	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):	1,348
---	--------	--	-------

Dataset Name: FY 1999 Planning Data

Page 6 of 12

Date of Dataset: 9/20/1999

# Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Rocky Flats

Site Summary Level: Rocky Flats Environmental Technology Site

Project RF008 / Pu Metals and Oxides Stabilization

Report Number: GEN-01b

Print Date: 3/9/2000

HQ ID: 0339

## Project Reconciliation

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 51,281

## Project Cost Changes

### Cost Adjustments Reconciliation Narratives

Cost Change Due to Scope Deletions (-):

Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+): 19,246 Rebaselining due to acceleration. New scope dollar estimate is not of audit quality.

Cost Growth Associated with Scope Previously Reported (+):

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 70,527

Additional Amount to Reconcile (+): -13,773

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 56,754

## Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Install Plutonium Stabilization and Packaging System in B371 by 9-30-99.			9/30/1999						Y		
SNM Stabilization and Packaging Complete	RF-0045		6/28/2002		6/28/2002						
IP307 Repkg all Metals & Oxides in 3013 Cans	RF-0261		5/31/2002		5/31/2002			Y			
FY00-T7 Install & Operate B371 Pu Packaging Sys	RF-0264		12/1/1999		12/1/1999						
RC-0024 FY99 - T1 Therm Stab 90%	RF-0265		9/30/1999	9/30/1999	9/30/1999		Y				
DP4-PuSPS Stab System Design Complete	RF-0266		5/18/1999		5/18/1999						
DP3 - Packaging System Design Compl	RF-0267		3/1/1999		3/1/1999						
FY98-T5 Thermal Stab 90% Pu Oxides	RF-0268		9/30/1998	9/30/1998	9/30/1998		Y				
IP306 Start Pkg Metal or Oxides in 3013 Cans	RF-0274		1/31/2000		1/31/2000			Y			

Dataset Name: FY 1999 Planning Data

Page 7 of 12

Date of Dataset: 9/20/1999

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

## Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Complete PBD 008 - PuMetals and Oxides Stab Proj	RF-OTHE-08		5/2/2003		5/2/2003					Y	
PBD008 Project Start			10/1/1997								

## Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Install Plutonium Stabilization and Packaging System in B371 by 9-30-99.											
SNM Stabilization and Packaging Complete	RF-0045	Y									Kaiser Hill Internal ( KHIs ) Milestones
IP307 Repkg all Metals & Oxides in 3013 Cans	RF-0261										Defense Nuclear Facility Safety Board ( DNFSBs ) Milestones
FY00-T7 Install & Operate B371 Pu Packaging Sys	RF-0264	Y									Rocky Flats Clean-up Agreement ( RFCAs ) Milestones
RC-0024 FY99 - T1 Therm Stab 90%	RF-0265										Rocky Flats Clean-up Agreement ( RFCAs ) Milestones
DP4-PuSPS Stab System Design Complete	RF-0266	Y									Rocky Flats Field Office ( RFFOs / CPMs ) Milestones
DP3 - Packaging System Design Compl	RF-0267	Y									Rocky Flats Field Office ( RFFOs / CPMs ) Milestones
FY98-T5 Thermal Stab 90% Pu Oxides	RF-0268										Rocky Flats Clean-up Agreement ( RFCAs ) Milestones
IP306 Start Pkg Metal or Oxides in 3013 Cans	RF-0274										Defense Nuclear Facility Safety Board ( DNFSBs ) Milestones
Complete PBD 008 - PuMetals and Oxides Stab Proj	RF-OTHE-08	Y			Y	Y					Kaiser Hill Internal ( KHIs ) Milestones
PBD008 Project Start				Y							PBD008 Project Start

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**



# Project Baseline Summary Report

Data Source: EM CDB

Report Number: GEN-01b

Operations/Field Office: Rocky Flats

Print Date: 3/9/2000

Site Summary Level: Rocky Flats Environmental Technology Site

HQ ID: 0339

Project RF008 / Pu Metals and Oxides Stabilization

## Performance Measure Metrics

Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planned 2004
NM														
MDR - Pu	Ncont	1,900.00	0.00	1,900.00						960.00	940.00			
Tech.														
Deployed	Ntd	3.00	0.00	3.00					1.00	2.00				
Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035	Planned 2036 - 2040
NM														
MDR - Pu	Ncont													
Tech.														
Deployed	Ntd													
Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2065	Planned 2066 - 2070	Exceptions	Lifecycle Total				
NM														
MDR - Pu	Ncont									1,900.00				
Tech.														
Deployed	Ntd								1.00	3.00				

## Technology Needs

Dataset Name: FY 1999 Planning Data

Page 9 of 12

Date of Dataset: 9/20/1999

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

## Technology Needs

Site Need Code: RF-SNM14

Site Need Name: Moisture Analytical Methods for Plutonium Materials

Focus Area Work Package ID: NMFA-02

Focus Area Work Package: Untitled (pending title by FA)

Focus Area: PLUTOFA

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Both

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Site Need Code: RF-SNM15

Site Need Name: Materials Identification and Surveillance of <30% Pu materials

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Site Need Code: RF-SNM16

Site Need Name: Long-Term Gas Generation Surveillance for Stabilized Plutonium Materials

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Both

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

---

## Technology Needs

Site Need Code: RF-SNM17

Site Need Name: Gas Generation Measurements for NM Shipping Environments

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Both

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Site Need Code: RF-SNM18

Site Need Name: Core Scientific R&D Capability In Support Of NMFA Nuclear Material Management Needs

Focus Area Work Package ID: NMFA-03

Focus Area Work Package: Untitled (pending title by FA)

Focus Area: PLUTOFA

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Risk Reduction

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Site Need Code: RF-SNM19

Site Need Name: Decontamination of >5 ppm Plutonium Contaminated Uranium and non-Special Nuclear Materials (SNM) Allowing Utilization of Paths other than Materials Disposition

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

---

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Rocky Flats**

Site Summary Level: **Rocky Flats Environmental Technology Site**

Project **RF008 / Pu Metals and Oxides Stabilization**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0339**

---

## Technology Needs

## Technology Deployments

<u>Deployment Status</u>	Deployment Year		
	<u>Planned</u>	<u>Forecast</u>	<u>Actual Date</u>
<b>Technology Name:</b> Plutonium Stabilization and Packaging System			
Potential Deployment	1999		
<b>Technology Name:</b> Super Critical Fluid Extraction			
Potential Deployment	2000		
<b>Technology Name:</b> Neutron Moderation			
Potential Deployment	2000		